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COMPUTERIZATION OF NAVY OUTPATIENT MENTAL HEALTH
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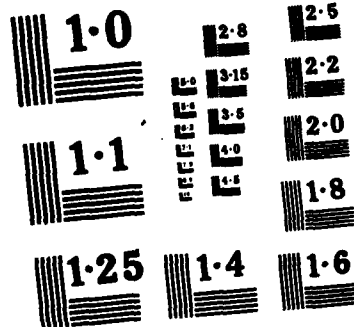
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COMPUTERIZATION OF NAVY OUTPATIENT MENTAL HEALTH CLINICS

M. W. CONGLETON

REPORT NO. 85-4

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COMPUTERIZATION OF NAVY OUTPATIENT
MENTAL HEALTH CLINICS

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To expedite communication of our research, this is a preprint of a paper which will appear in the 1985 Proceedings of the American Association for Medical Systems and Informatics.

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SUMMARY

The Navy Mental Health Information System, NAMHIS is a comprehensive, automated recordkeeping and reporting system. It is designed to meet the needs of clinicians and administrators in Outpatient Navy Mental Health Clinics. The public domain version of the Computer Stored Ambulatory Record, COSTAR, was extensively modified to meet the software requirements of NAMHIS and covers the five system functions: (Patient Registration, Encounter Data, Patient History, Mental Status Examination, and Reporting Capability). Data collection forms have been developed, as well as standardized reports of individual patient/clinician consultations.

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Introduction

The Navy Mental Health Information System (NAMHIS) has been developed to meet the requirements of clinicians and administrators in ^{outpatient} Navy mental health ^{clinics}. NAMHIS captures, stores, displays, and prints relevant, complete, and standardized information so that it is immediately accessible. Timely reports of patient consultations, management data, and medical audit and utilization review procedures prescribed by medical quality assurance and accreditation programs are produced by the system (1). The Computer Stored Ambulatory Record (COSTAR) software has been modified to serve as the vehicle for automation of NAMHIS and accommodate the necessary data elements of Navy outpatient mental health.

NAMHIS Design and Development

Phase I of the NAMHIS project included needs assessment and system analysis. In this phase reporting requirements were analyzed and the need for a standardized Navy outpatient mental health reporting system was documented. The design and testing of a prototype recordkeeping system was subsequently completed at a Fleet Mental Health Support Unit (2,3). In Phase II the system was designed and specifications were generated. Data collection forms and an efficient system utilizing these instruments were developed, along with standardized reports of individual consultations and summary statistical reports involving entire clinic populations. The actual development of NAMHIS took place in Phase III. The Computer Stored Ambulatory Record (COSTAR) software was chosen as the vehicle for automating NAMHIS. The public domain version of COSTAR served as the starting point and has been extensively modified for use in Navy psychiatric outpatient settings. This modification was achieved through a team effort representing psychiatry, clinical psychology, mental health administration, and computer science. Every effort is being expended to make the system easy to use including the preparation of a users' reference manual tailored to NAMHIS characteristics. A set of job aids that facilitate the work flow in a fleet mental health support unit is also being provided.

NAMHIS System Description

NAMHIS includes five system functions: Patient Registration, Encounter Data, Patient History, Mental Status Examination, and Reporting Capability.

Patient Registration. The patient must be registered before any encounter data can be entered into the patient's medical record. A Patient Registration Form must be completed by each new patient (See Figure 1). This form contains

basic identifying information and demographic data. Only two registration data items require assistance from staff--the Suffix to Social Security Number and the patient's Enlisted Rating of Officer Category. The suffix is a two-digit CHAMPUS code that defines the patient's family position. For example, 20 means Uniformed Service Member (Sponsor). The Suffix and sponsor's Social Security Number constitute a unique patient identifier and is used as the unit number in COSTAR.

**MENTAL HEALTH CARE
PATIENT REGISTRATION FORM**

THIS FORM TO BE COMPLETED BY THE PATIENT. RESPOND TO ALL ITEMS. PLEASE PRINT.			
1. PATIENT NAME			
LAST NAME _____	FIRST NAME _____	M. I. _____	
2. SEX <input type="checkbox"/> (M) Male <input type="checkbox"/> (F) Female		3. DATE OF BIRTH ____ / ____ / ____ MONTH DAY YEAR	
4. DUTY STATION <i>If DEPENDENT or CIVILIAN, print home address.</i> _____ _____			
CITY _____		STATE _____	ZIP CODE _____
5. SOCIAL SECURITY NUMBER (SSN) ____ - ____ - ____		SSN SUFFIX (Office use.) ____	6. TODAY'S DATE (Date of Registration.) ____ / ____ / ____ MONTH DAY YEAR
7. ETHNIC BACKGROUND			
<input type="checkbox"/> (W) White <input type="checkbox"/> (OR) Oriental <input type="checkbox"/> (H) Hispanic <input type="checkbox"/> (B) Black		<input type="checkbox"/> (F) Filipino or Malayan <input type="checkbox"/> (N) Native American <input type="checkbox"/> (OT) Other	
8. MARITAL STATUS			
<input type="checkbox"/> (N) Never married <input type="checkbox"/> (M F) Married first time <input type="checkbox"/> (M O) Married other than first		<input type="checkbox"/> (S) Separated <input type="checkbox"/> (D) Divorced <input type="checkbox"/> (W) Widowed	
9. PATIENT STATUS			
<input type="checkbox"/> (A) Active duty <input type="checkbox"/> (D S) Dependent spouse <input type="checkbox"/> (D C) Dependent child		<input type="checkbox"/> (R) Retired <input type="checkbox"/> (O) Other	
10. BRANCH OF SERVICE			
<input type="checkbox"/> (USN) USN or USNR <input type="checkbox"/> (USM) USMC		<input type="checkbox"/> (USC) USCG <input type="checkbox"/> (O) Other/Does not apply	
11. PAYGRADE OR RANK <i>Check appropriate box.</i>			
If Dependent, check here <input type="checkbox"/> (D)		If Nondependent Civilian, check here <input type="checkbox"/> (CI)	
<input type="checkbox"/> E1 <input type="checkbox"/> E2 <input type="checkbox"/> E3 <input type="checkbox"/> E4 <input type="checkbox"/> E5	<input type="checkbox"/> E6 <input type="checkbox"/> E7 <input type="checkbox"/> E8 <input type="checkbox"/> E9		
<input type="checkbox"/> W1 <input type="checkbox"/> CW2 <input type="checkbox"/> CW3 <input type="checkbox"/> CW4	<input type="checkbox"/> O6 <input type="checkbox"/> O7 <input type="checkbox"/> O8 <input type="checkbox"/> O9 <input type="checkbox"/> O10		
<input type="checkbox"/> O1 <input type="checkbox"/> O2 <input type="checkbox"/> O3 <input type="checkbox"/> O4 <input type="checkbox"/> O5			
12. DATE FIRST CAME ON ACTIVE DUTY <i>Ignore if Dependent or Civilian.</i> ____ / ____ / ____ MONTH DAY YEAR		13. IN RECRUIT TRAINING? <i>Ignore if Dependent or Civilian.</i> <input type="checkbox"/> (Y) Yes <input type="checkbox"/> (N) No	
14. ENLISTED RATING OR OFFICER CATEGORY <i>Enter one from chart with assistance from staff. Ignore if Dependent or Civilian.</i> _____			

NHRC 6320-30.1A (01-84)

Figure 1

A table of Navy Enlisted Ratings and Officer Categories has been constructed in NAMHIS and tied to the COSTAR code for Item 14 on the Patient Registration Form. This feature makes it relatively easy to retrieve patient data for occupations considered at risk for psychiatric stress, an important capability for conducting Navy mental health research. The COSTAR registration prompt sequence in

**MENTAL HEALTH CARE
INITIAL ENCOUNTER FORM**

THIS SECTION TO BE COMPLETED BY THE TECHNICIAN. ANSWER EACH ITEM. PLEASE PRINT.

PATIENT NAME

LAST NAME _____ SEX <input type="checkbox"/> (M) Male <input type="checkbox"/> (F) Female	FIRST NAME _____ DATE OF BIRTH _____ / _____ / _____ MONTH DAY YEAR	M. I. _____ DATE OF ENCOUNTER _____ / _____ / _____ MONTH DAY YEAR
---	--	---

CLINICIAN No. 1 CODE: _____	CLINICIAN No. 2 CODE: _____
--------------------------------	--------------------------------

SITE CODE Check only one.

- | | |
|---|---|
| <input type="checkbox"/> (A) NAS North Island
<input type="checkbox"/> (B) Naval Station San Diego
<input type="checkbox"/> (C) Naval Training Center San Diego | <input type="checkbox"/> (D) NAS Miramar
<input type="checkbox"/> (E) San Diego Naval Hospital
<input type="checkbox"/> (O) Other |
|---|---|

TYPE OF PRINCIPAL SERVICE PROVIDED (Evaluation/Psychotherapy) Check only one.

- | | |
|---|--|
| <input type="checkbox"/> (A) Suitability or fitness for duty
<input type="checkbox"/> (B) Special program screening
<input type="checkbox"/> (C) Psychometric testing
<input type="checkbox"/> (D) Fit for confinement
<input type="checkbox"/> (E) Medical Board
<input type="checkbox"/> (F) Sanity hearing
<input type="checkbox"/> (G) NAB or RAB | <input type="checkbox"/> (H) Individual therapy
<input type="checkbox"/> (I) Group therapy
<input type="checkbox"/> (J) Couple/family therapy
<input type="checkbox"/> (K) Relaxation therapy
<input type="checkbox"/> (L) Other screening
<input type="checkbox"/> (O) Other |
|---|--|

VISIT CLASSIFICATION

- | | |
|---|--|
| <input type="checkbox"/> (1) Routine initial visit
<input type="checkbox"/> (2) 72 hr. initial visit | <input type="checkbox"/> (3) Emergency initial visit (clinical)
<input type="checkbox"/> (4) Emergency initial visit (admin.) |
|---|--|

1. DATE CONSULT RECEIVED OR APPOINTMENT REQUESTED (DCR*)

____ / ____ / ____
 MONTH DAY YEAR

2. WHO REFERRED PATIENT TO PSYCH? Check only one. (RF-)

- | | |
|--|--|
| <input type="checkbox"/> (A) Dispensary sick call
<input type="checkbox"/> (B) Other medical service/Hospital
<input type="checkbox"/> (C) Command/Command sick call
<input type="checkbox"/> (D) Brig/Brig sick call | <input type="checkbox"/> (E) Chaplain
<input type="checkbox"/> (F) Self
<input type="checkbox"/> (G) Legal Officer
<input type="checkbox"/> (O*) Other: _____ |
|--|--|

3. SPECIAL PROGRAM SCREENING Check only one. (SPS-)

- | | |
|--|---|
| <input type="checkbox"/> (A) None
<input type="checkbox"/> (B) Submarine duty
<input type="checkbox"/> (C) UDT, SEAL or Diving
<input type="checkbox"/> (D) PRP | <input type="checkbox"/> (E) Deepfreeze
<input type="checkbox"/> (F) Company Commander or Drill Instructor
<input type="checkbox"/> (O*) Other: _____ |
|--|---|

NHRC 6320 30.1B (05-84)

[CONTINUE ON REVERSE]

Figure 2

NAMHIS follows the sequence of data items shown on the Patient Registration Form. This makes data entry straightforward, easy, and fast.

Encounter Data. Two forms are used in NAMHIS for collecting and entering encounter data--an Initial Encounter Form (see Figure 2) and a Follow-Up Encounter

THIS SECTION TO BE COMPLETED BY THE CLINICIAN. PLEASE RESPOND TO ALL ITEMS.

4. PRECIPITATING PROBLEMS AND SYMPTOMS. Rate patient on applicable items by circling the appropriate number: 1 = Mild, 2 = Moderate, 3 = Severe. If a problem or symptom is of Short Duration, write "SD" to the left of the letter code corresponding to the item.

DPR - 1 2 3 Depression	LN - 1 2 3 Loneliness
AXY - 1 2 3 Anxiety	SCID - 1 2 3 Suicide Ideation
DLP - 1 2 3 Disciplinary/Legal Problem	SGES - 1 2 3 Suicide Gesture
ALCA - 1 2 3 Alcohol Abuse	SCAT - 1 2 3 Suicide Attempt
DCB - 1 2 3 Drug Abuse	HCID - 1 2 3 Homocidal Ideation
ETD - 1 2 3 Eating Disorder	HBR - 1 2 3 Homicidal Behavior
SLD - 1 2 3 Sleep Disorder	MDN - 1 2 3 Moodiness
SXP - 1 2 3 Sexual Problem	NRV - 1 2 3 Nervousness
MFP - 1 2 3 Marital/Family Problem	TMP - 1 2 3 Temper Outbursts
IPM - 1 2 3 Interpersonal Problem	EXW - 1 2 3 Excess Worry
PNL - 1 2 3 Problem with Navy Life	CSP - 1 2 3 Crying Spells
JP - 1 2 3 Job Problem	LSE - 1 2 3 Loss of Energy/Interest
WD - 1 2 3 Wants Discharge	SLP - 1 2 3 Sleep Impairment
BB - 1 2 3 Bizarre Behavior	APT - 1 2 3 Appetite Impairment
SCP - 1 2 3 Somatic Complaint	PPO* - 1 2 3 Other: _____
HSK - 1 2 3 Homesickness	NPL - Non Applicable

CODE: COMMENTS: _____
 CODE: COMMENTS: _____
 CODE: COMMENTS: _____

5. SERVICE RECORD REVIEWED? (SRR-)

☐ (Y) Yes ☐ (N) No ☐ (L) Lost or not accessible

6. HEALTH RECORD REVIEWED? (HRR-)

☐ (Y) Yes ☐ (N) No ☐ (L) Lost or not accessible

7. CONSULT FORM REVIEWED? (CFR-)

☐ (Y) Yes ☐ (N) No ☐ (L) Lost or not accessible

8. PRIMARY DIAGNOSIS

AXIS 1 - _____ * AXIS 2 - _____ *

CODE: COMMENTS: _____
 CODE: COMMENTS: _____

9. DISPOSITION Check only one. (DSP-)

☐ (Q) Fit for full duty ☐ (S) Unfit for duty ☐ (U) Deferred
☐ (R) Unsuitable ☐ (T) Limited duty ☐ (V) Dependent - does not apply

COMMENTS: _____

10. RECOMMENDATION Check ALL that apply.

ALCR <input type="checkbox"/> Alcohol rehabilitation	CHM <input type="checkbox"/> CHAMPUS
DRGR <input type="checkbox"/> Drug rehabilitation	ADSEP <input type="checkbox"/> Administrative separation
CAAC <input type="checkbox"/> CAAC	MB <input type="checkbox"/> Medical Board
HSP <input type="checkbox"/> Admit to hospital	FSC <input type="checkbox"/> Family Service Center
OTX <input type="checkbox"/> Return for outpatient treatment	NFU <input type="checkbox"/> No follow-up indicated
FEVL <input type="checkbox"/> Return for further evaluation	RCO* <input type="checkbox"/> Other: _____

CODE: COMMENTS: _____
 CODE: COMMENTS: _____

11. SPECIAL PROGRAM SCREENING RESULTS Check one only. (SPSR-)

☐ (A) Qualified ☐ (C) Deferred
☐ (B) Disqualified ☐ (D) Does not apply

BRIEF COMMENTS (BRC*) For comments pertaining to particular items, list code/associated comment.

Figure 2

Form. The Follow-Up Encounter Form contains a subset of data items collected during the initial encounter. Data items such as referral source and precipitating factors need only be collected during the first visit. Therefore, these items do not appear on the Follow-Up Encounter Form. The Encounter Forms are divided into a Technician Section and a Clinician Section. The Technician Section includes items that do not require a high level of clinical expertise to complete and leaves the clinician free to address those items necessitating the use of trained clinical judgment. With the patient completing the Registration Form, the responsibility for data collection is divided three ways thereby maximizing the resources available at a Fleet Mental Health Support Unit.

The clinician is required to record a primary diagnosis on the Encounter Form. This diagnosis is taken from the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association (DSM-III) (4). All DSM-III diagnoses have been added to the COSTAR Directory, and a translation directory containing these diagnoses and codes has been incorporated.

Patient History. A review of existing standardized patient history forms and consultation with Navy clinicians established criteria for the NAMHIS patient history module. Thoroughness and relevance for use in a Navy outpatient mental health facility was emphasized. The Patient History Form is divided into 11 sections typically considered important to a clinical interview: family history, childhood history, school history, interpersonal adjustment history, civilian arrests, past vocational history, prior psychiatric history, relevant medical history, drug/alcohol history, current marriage and family history, and military history. A complete patient history is easily and rapidly produced after the clinician responds to specific items and adds relevant textual comments.

Mental Status Examination. A standardized mental status examination (MSE) was developed for incorporation into the NAMHIS project (5). No existing MSE met the required functional specifications. However, the Missouri MSE was deemed suitable to use as a starting point and could be tailored to fit Navy needs by adding to the content and making revisions to the format. It was determined that all of the items in the Missouri MSE were appropriate and usable. However, several sections were considered incomplete for the intended purpose. Therefore, these sections were augmented to make the MSE more comprehensive and to provide the clinician with alternatives which describe more adequately the clinical situations encountered in the military environment. The NAMHIS MSE Form (see Figure 3) is divided

MENTAL STATUS EXAMINATION
NAVY MENTAL HEALTH INFORMATION SYSTEM (NAMHIS)
NAVAL HEALTH RESEARCH CENTER
SAN DIEGO, CALIFORNIA

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PATIENT NAME <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ <small>Last</small> _____ <small>First</small> _____ <small>M. I.</small> </div>			SEX <input type="checkbox"/> M <input type="checkbox"/> F
DATE OF BIRTH <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ <small>Month</small> _____ <small>Day</small> _____ <small>Year</small> </div>	DATE OF ENCOUNTER <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ <small>Month</small> _____ <small>Day</small> _____ <small>Year</small> </div>	SITE CODE B	
CLINICIAN NAME <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> _____ <small>Last</small> _____ <small>First</small> </div>			TYPE CODE M

VISIT CLASSIFICATION

<input type="checkbox"/> 1. ROUTINE INITIAL VISIT	<input type="checkbox"/> 4. EMERGENCY INITIAL VISIT (ADMIN.)
<input type="checkbox"/> 2. 72-HOUR INITIAL VISIT	<input type="checkbox"/> 5. ROUTINE FOLLOW-UP VISIT
<input type="checkbox"/> 3. EMERGENCY INITIAL VISIT (CLINICAL)	<input type="checkbox"/> 6. EMERGENCY FOLLOW-UP VISIT

INSTRUCTIONS
 For each section, check (X) box, or circle number for most appropriate answer(s).
 If '(NORMAL)' is checked, simply go to the next section.
 If not 'normal,' rate (on the following scale) pertinent items only.
 1 = MILD / TO A SMALL EXTENT
 2 = MODERATE / TO SOME EXTENT
 3 = SEVERE / TO A GREAT EXTENT

<div>1 GENERAL APPEARANCE (NORMAL) []</div> <div>FACIAL EXPRESSION:</div> <div>2 CALM 1 2 3</div> <div>3 CHEERFUL 1 2 3</div> <div>4 SAD 1 2 3</div> <div>5 EXPRESSIONLESS 1 2 3</div> <div>6 HOSTILE 1 2 3</div> <div>7 WORRIED 1 2 3</div> <div>8 FRIGHTENED 1 2 3</div> <div>9 PERPLEXED 1 2 3</div> <div>10 PREOCCUPIED 1 2 3</div> <div>11 PERSPIRING 1 2 3</div> <div>12 AVOIDS GAZE 1 2 3</div> <div>13 APPEARS YOUNGER 1 2 3</div> <div>14 APPEARS OLDER 1 2 3</div> <div>DRESS:</div> <div>15 METICULOUS 1 2 3</div> <div>16 CLOTHING, HYGIENE POOR 1 2 3</div> <div>17 WELL GROOMED 1 2 3</div> <div>18 ECCENTRIC 1 2 3</div> <div>19 SEDUCTIVE 1 2 3</div> <div>20 OTHER: _____</div> <div>21 MOTOR ACTIVITY (NORMAL) []</div> <div>22 INCREASED AMOUNT 1 2 3</div> <div>23 DECREASED AMOUNT 1 2 3</div> <div>24 AGITATION 1 2 3</div> <div>25 TICS 1 2 3</div> <div>26 TREMOR 1 2 3</div> <div>27 PECULIAR POSTURING 1 2 3</div> <div>28 UNUSUAL GAIT 1 2 3</div> <div>29 REPETITIVE ACTS 1 2 3</div> <div>30 OTHER: _____</div> <div>31 SPEECH (NORMAL) []</div> <div>32 LOGICAL 1 2 3</div> <div>33 COHERENT 1 2 3</div> <div>34 ARTICULATE 1 2 3</div> <div>35 EXCESSIVE AMOUNT 1 2 3</div> <div>36 REDUCED AMOUNT 1 2 3</div>	<div>37 PUSH OF SPEECH 1 2 3</div> <div>38 PRESSURED 1 2 3</div> <div>39 SLOWED 1 2 3</div> <div>40 RAPID 1 2 3</div> <div>41 HESITANT 1 2 3</div> <div>42 LOUD 1 2 3</div> <div>43 SOFT 1 2 3</div> <div>44 MUTE 1 2 3</div> <div>45 SLURRED 1 2 3</div> <div>46 STUTTERING 1 2 3</div> <div>47 INCOHERENT 1 2 3</div> <div>48 ECHOLALIA 1 2 3</div> <div>49 OTHER: _____</div> <div>501 INTERVIEW BEHAVIOR (NORMAL) []</div> <div>51 ANGRY OUTBURSTS 1 2 3</div> <div>52 IRRITABLE 1 2 3</div> <div>53 TENSE 1 2 3</div> <div>54 IMPULSIVE 1 2 3</div> <div>55 HOSTILE 1 2 3</div> <div>56 COMBATIVE 1 2 3</div> <div>57 SILLY 1 2 3</div> <div>58 SENSITIVE 1 2 3</div> <div>59 APATHETIC 1 2 3</div> <div>60 WITHDRAWN 1 2 3</div> <div>61 EVASIVE 1 2 3</div> <div>62 DEFENSIVE 1 2 3</div> <div>63 GUARDED 1 2 3</div> <div>64 PASSIVE 1 2 3</div> <div>65 AGGRESSIVE 1 2 3</div> <div>66 NAIVE 1 2 3</div> <div>67 OVERLY DRAMATIC 1 2 3</div> <div>68 MANIPULATIVE 1 2 3</div> <div>69 DEPENDENT 1 2 3</div> <div>70 COOPERATIVE 1 2 3</div> <div>71 UNCOOPERATIVE 1 2 3</div> <div>72 DEMANDING 1 2 3</div> <div>73 NEGATIVISTIC 1 2 3</div> <div>74 CALLOUS 1 2 3</div> <div>75 OTHER: _____</div>
--	---

Figure 3

76	FLOW OF THOUGHT (NORMAL)	[]	136	DELUSIONS OF PERSECUTION	1 2 3
77	GOAL DIRECTED	1 2 3	137	DELUSIONS OF GRANDEUR	1 2 3
78	BLOCKING	1 2 3	138	DELUSIONS OF REFERENCE	1 2 3
79	SPONTANEITY	1 2 3	139	DELUSIONS OF INFLUENCE	1 2 3
80	CIRCUMSTANTIAL	1 2 3	140	SOMATIC DELUSIONS	1 2 3
81	TANGENTIAL	1 2 3	141	OTHER DELUSIONS:	1 2 3
82	PERSEVERATION	1 2 3			
83	FLIGHT OF IDEAS	1 2 3	142	SYSTEMATIZED DELUSIONS	1 2 3
84	RAMBLING	1 2 3	143	OTHER:	
85	LOOSE ASSOCIATION	1 2 3			
86	INDECISIVE	1 2 3	144	ORIENTATION (NORMAL)	[]
87	DISTRACTIBLE	1 2 3	145	IMPAIRED TO TIME	1 2 3
88	ILLOGICAL	1 2 3	146	IMPAIRED TO PLACE	1 2 3
89	OTHER:		147	IMPAIRED TO PERSON	1 2 3
			148	OTHER:	
90	MOOD AND AFFECT (NORMAL)	[]			
91	DEPRESSED MOOD	1 2 3	149	MEMORY (NORMAL)	[]
92	ANXIOUS MOOD	1 2 3	150	ALERT	1 2 3
93	EXPANSIVE MOOD	1 2 3	151	CLOUDING OF CONSCIOUSNESS	1 2 3
94	ELEVATED MOOD	1 2 3	152	INABILITY TO CONCENTRATE	1 2 3
95	SAD AFFECT	1 2 3	153	AMNESIA	1 2 3
96	INAPPROPRIATE AFFECT	1 2 3	154	GOOD IMMEDIATE RECALL	1 2 3
97	FLAT AFFECT	1 2 3	155	POOR IMMEDIATE RECALL	1 2 3
98	CONSTRICTED AFFECT	1 2 3	156	GOOD RECENT MEMORY	1 2 3
99	BLUNT AFFECT	1 2 3	157	POOR RECENT MEMORY	1 2 3
100	SHALLOW AFFECT	1 2 3	158	GOOD REMOTE MEMORY	1 2 3
101	EUPHORIC AFFECT	1 2 3	159	POOR REMOTE MEMORY	1 2 3
102	LABILE AFFECT	1 2 3	160	DIGIT SPAN DONE POORLY	1 2 3
103	OTHER:		161	CONFABULATION	1 2 3
			162	OTHER:	
104	SUICIDE (ABSENT)	[]			
105	THOUGHTS	1 2 3	163	INTELLECT (NORMAL)	[]
106	PLANS	1 2 3	164	INTELLECT ABOVE NORMAL	1 2 3
107	OTHER:		165	INTELLECT BELOW NORMAL	1 2 3
			166	PAUCITY OF KNOWLEDGE	1 2 3
108	HOMICIDE (ABSENT)	[]	167	VOCABULARY POOR	1 2 3
109	THOUGHTS	1 2 3	168	SERIAL SEVENS DONE POORLY	1 2 3
110	PLANS	1 2 3	169	ABLE TO ABSTRACT	1 2 3
111	OTHER:		170	POOR ABSTRACTION	1 2 3
			171	OTHER:	
112	CONTENT OF THOUGHT (NORMAL)	[]			
113	ASSAULTIVE IDEAS	1 2 3	172	INSIGHT & JUDGMENT (NORMAL)	[]
114	ANTISOCIAL ATTITUDES	1 2 3	173	GOOD INSIGHT	1 2 3
115	SUSPICIOUSNESS	1 2 3	174	POOR INSIGHT	1 2 3
116	POVERTY OF CONTENT	1 2 3	175	GOOD JUDGMENT	1 2 3
117	PHOBIAS	1 2 3	176	POOR JUDGMENT	1 2 3
118	OBSESSIONS/COMPULSIONS	1 2 3	177	GOOD IMPULSE CONTROL	1 2 3
119	FEELINGS OF UNREALITY	1 2 3	178	POOR IMPULSE CONTROL	1 2 3
120	FEELS PERSECUTED	1 2 3	179	DENIAL	1 2 3
121	THOUGHTS OF RUNNING AWAY	1 2 3	180	UNREALISTIC REGARDING DEGREE OF ILLNESS	1 2 3
122	SOMATIC COMPLAINTS	1 2 3	181	DOES NOT KNOW WHY S/HE IS HERE	1 2 3
123	IDEAS OF GUILT	1 2 3	182	MOTIVATED FOR TREATMENT	1 2 3
124	IDEAS OF HOPELESSNESS	1 2 3	183	UNMOTIVATED FOR TREATMENT	1 2 3
125	IDEAS OF WORTHLESSNESS	1 2 3	184	MOTIVATED FOR NAVY	1 2 3
126	EXCESSIVE RELIGIOSITY	1 2 3	185	UNMOTIVATED FOR NAVY	1 2 3
127	SEXUAL PREOCCUPATION	1 2 3	186	OTHER:	
128	BLAMES OTHERS	1 2 3			
129	DEPERSONALIZATION	1 2 3			
130	DEREALIZATION	1 2 3			
131	ILLUSIONS PRESENT	1 2 3			
132	AUDITORY HALLUCINATIONS	1 2 3			
133	VISUAL HALLUCINATIONS	1 2 3			
134	TACTILE HALLUCINATIONS	1 2 3			
135	OTHER HALLUCINATIONS:	1 2 3			

COMMENTS: (BRC)

NHRC-6520/30-S [12-84]

Figure 3

to 14 sections: general appearance, motor activity, speech, interview behavior, flow of thought, mood and affect, suicide, homicide, content of thought, orientation, memory, intellect, insight and judgment, and comments. Each section is designed to encompass aspects of behavior found in the customary mental status report

and to adequately describe observations of the patient. An index of severity for items within a section was achieved by assigning each item a numerical modifier of 1, 2, or 3. If all items within a section are within normal limits, the clinician can select the "Normal" alternative and continue to the next area being evaluated. If the items within a section do not adequately describe the clinical situation, the "Other" category can be selected and the appropriate term or narrative description added.

Reporting Capability. Both standardized and user-defined reports are available within NAMHIS including individual patient reports and statistical reports aggregated across multiple patients.

Individual patient reports include a printout of the patient's history, a display of the patient's registration, a Report of Consultation, and a Mental Status Examination report. The Report of Consultation serves two purposes: (1) it serves as a report to the referral source by presenting an essential distillation of the mental health consultation; and (2) it provides hard copy documentation of the patient's visit for clinic files and for the patient's medical record. The patient history and Mental Status Examination are attached to the Report of Consultation and become a permanent part of the patient's medical record.

Besides these individual patient reports, NAMHIS generates summary statistical reports involving the entire patient population of a clinic. Each clinic's patient population characteristics (e.g., demographics, presenting problems, treatment needs) is helpful to clinic managers in deciding policy, selecting personnel, and designing treatment programs. The three statistical reports used by Navy administrators of mental health care services are the Monthly Managerial Report, the Monthly Outpatient Morbidity Report, and the Monthly Quality Assurance Report.

Future Plans

NAMHIS has been implemented initially in one clinic in the San Diego region. After test and evaluation of the system in this operational environment, any needed modifications will be made to insure that NAMHIS functions as intended. Following this milestone, implementation of NAMHIS will be considered for all clinics in the San Diego region. Ultimately, it is expected that NAMHIS will be recommended for Navywide implementation.

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